Gulf of Mexico Harmful Algal Bloom Bulletin

11 August 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

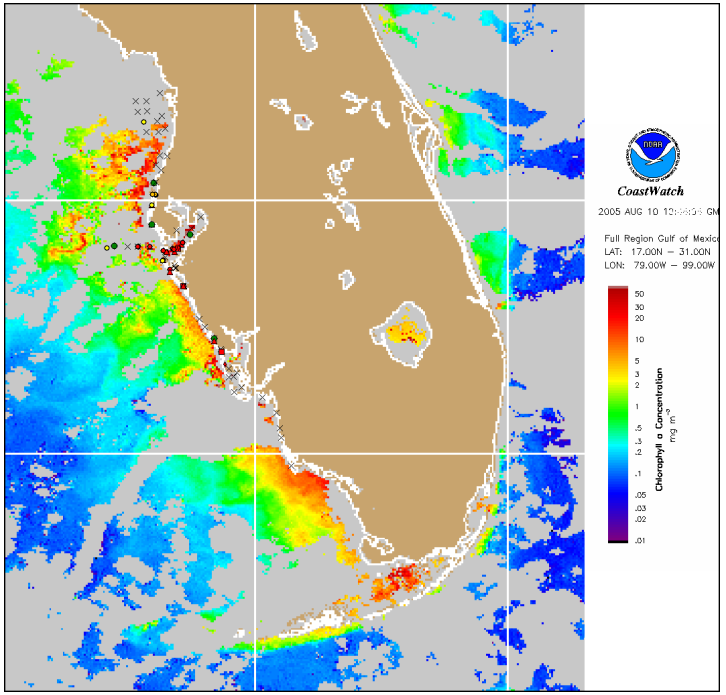
Last bulletin: August 8, 2005

Conditions: A harmful algal bloom has been identified from northern Pinellas to northern Lee County. Very low impacts are possible in northern Pinellas; patchy low to moderate impacts are possible from southern Pinellas to northern Sarasota County through Sunday. Patchy low to high impacts are possible in Charlotte and northern Lee County through Sunday. Dead fish have been reported in the past few days from central Pinellas to southern Manatee County.

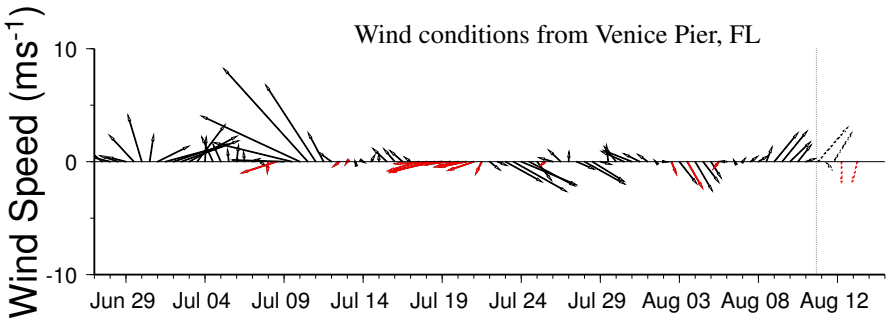
Analysis: The current bloom persists offshore of Pasco county with southward expansion to northern Lee County, though appears to be dissipating along southern Manatee and Sarasota counties. A high chlorophyll band continues to extend along the entire coast. A patchy band extends out 31 miles offshore of Pasco, with levels from 9-20 μg/L. Though obscured by clouds, the band appears to extend in patches out to 12 miles offshore of Pinellas County, with levels from 1-20 μg/L. A hot spot remains offshore of Clearwater (20 μg/L; 27°47', 82°56'). A separate high patch is located 32 miles offshore of Clearwater (20-40 μg/L; 27°46', 82°24'). Chlorophyll band extends out 11-13 miles offshore from Manatee to Sarasota counties, with levels from 3-10 μg/L. A hot spot remains near Siesta Key (15 μg/L; 27°15', 82°37'). Higher chlorophyll levels are visible(8-30 μg/L) offshore of Charlotte and Lee counties, although cloudiness obscures nearshore areas and southward extent. Sampling confirms persistence of bloom offshore of Pasco (low counts; FWRI). Recent northwesterly winds may have transported offshore *K. brevis* towards shore. Recommend sampling in Pasco county.

Since previous bulletin, wind transport model indicates primarily southward transport, from 7-12 km. Variable winds today through Sunday will likely maintain bloom location. Onshore winds every afternoon will increase likelihood of respiratory distress reports and dead fish.

~Fenstermacher & Fisher

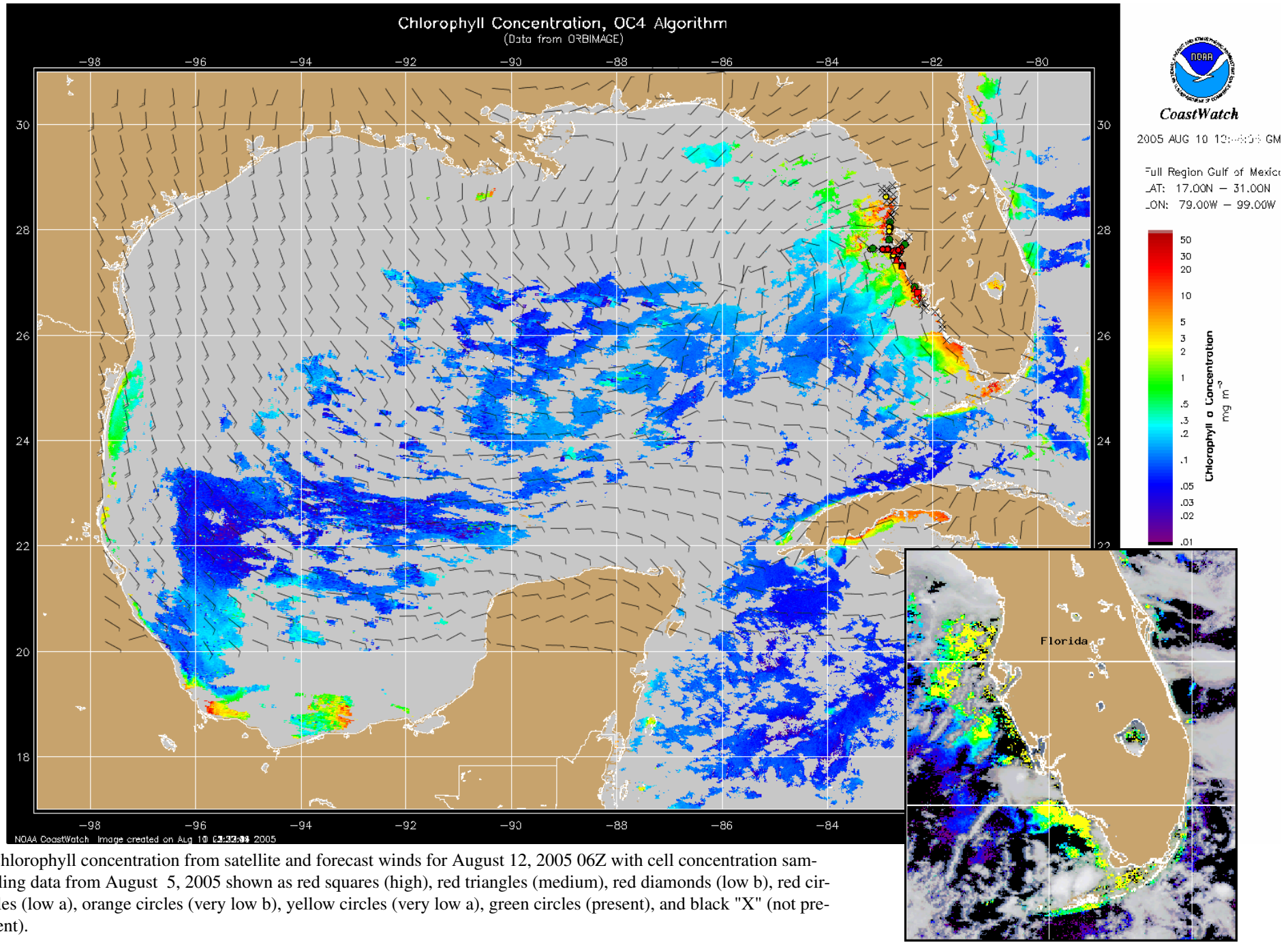


Chlorophyll concentration from satellite with HAB areas shown by red polygon(s). Cell concentration sampling data from August 5, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: NWS forecasts southwesterlies today (5-10 knots; 3-5 m/s). Southeasterlies followed by onshore winds every afternoon tonight through Saturday (5-10 knots; 3-5 m/s). Easterlies followed by onshore winds in the afternoon on Sunday and Monday (5-10 knots; 3-5 m/s).



Chlorophyll concentration from satellite and forecast winds for August 12, 2005 06Z with cell concentration sampling data from August 5, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Blooms shown in red (see p. 1 analysis)

Wind conditions from Egmont Key, FL